

**METHOD AND APPARATUS FOR ENCODING PAPER WITH INFORMATION****Abstract of the Disclosure**

5           Paper is textured with a pattern that yields a known signature signal when transformed to the frequency domain. This signature can be used for various purposes, including determining the angular orientation of the paper when scanned, conveying a plural-bit digital watermark, and for simple document recognition purposes (e.g., photocopiers that refuse to reproduce banknotes). The texturing can be effected during  
10 the paper-making process, e.g., by shaping the surface of a de-watering element accordingly.